

## PATENT ABSTRACTS OF JAPAN

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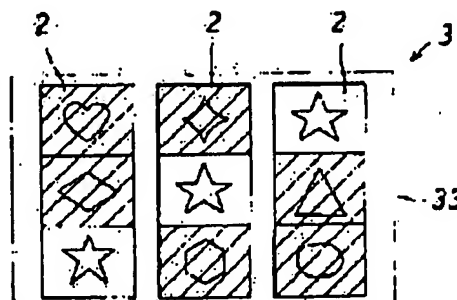
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## (54) SLOT MACHINE

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To considerably improve enjoyment of a game by enabling a player to easily discriminate relevant patterns in the event of winning a prize in a slot machine installed in a pachinko game place or the like.

**SOLUTION:** A display part 3 of this slot machine displays a plurality of patterns aligned longitudinally and laterally. The display part 3 is provided with a liquid crystal panel 33, and each pattern can be seen through the liquid crystal panel 33. In the event of winning a prize, areas opposed to the patterns that form the prize winning patterns are left transparent, and areas opposed to the other patterns are colored to be translucent or opaque. The patterns unrelated to the prize winning patterns are therefore put in the obscure or invisible state to clearly indicate only the patterns related to the prize winning patterns.



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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the slot machine which determines whether to be winning a prize from enumeration of the pattern shown in a display.

[0002]

[Description of the Prior Art] Conventionally, a slot machine is well known as a game machine with which a pattern is doubled. The kind of slot machine makes 3 juxtaposition the drum of the shape of a ring which gave how many kinds of those patterns to the peripheral surface at equal intervals, contains it in a machine frame, and enables it to have checked some of the patterns of each of that drum by looking from the outside through the display slack fluoroscopy aperture generally. The display carries out opening of the front face of a machine frame partially for example, corresponding to each drum, closes the opening by transparent materials, such as a glass plate, and changes; and as usually, for every drum, every three a total of nine patterns align in all directions, and are shown here. A slot machine performs a game here using a predetermined medal, and when enumeration of the pattern updated by the control unit for changing the input port which throws in the medal for it, and the pattern shown in a display after an injection of a medal to a machine frame, and actuation of this control unit forms a predetermined winning-a-prize pattern, the hopper in which return opening for returning the medal of a predetermined number and the medal for return are stored is formed. In addition, although a control unit consists of a slot lever for rotating each drums all at once, and a stop button which can stop the drum under rotation according to an individual, there is also a thing of form which makes each drum stop automatically, without having a stop button.

[0003] And if according to the slot machine constituted as mentioned above enumeration of the pattern shown in a display forms a predetermined winning-a-prize pattern when a control unit is operated, a game is performed after an injection of the medal to input port and all the drums stop, a game person can acquire rights. For example, when the predetermined pattern in a top drum is shown in a display, a medal is returned two sheets. When the pattern of the same kind in a \*\*\*\* drum arranges on a straight line, the medal of 6-15 sheets is returned by the classification of this pattern. When "7" arranges on a straight line as a pattern of the same kind especially, the right that the probability which forms a winning-a-prize pattern in subsequent games with return of the medal of a predetermined number is raised will be acquired.

[0004] Generally the number of injections of the medal per time makes three sheets an upper limit. At the time of an one-sheet injection in addition, the horizontal single tier of the middle At the time of a two-sheet injection, the horizontal single tier of one of each stages with moreover, the supply of a right [ as opposed to / when the train which added the direction of slant is made into winning-a-prize decision Rhine, respectively at the time of a three sheet injection and a winning-a-prize pattern is formed on the Rhine / like / \*\*\*\* / a game person ] The lamp formed near the display is made to turn on and it enables it to have told winning a prize to the game person.

[0005]

[Problem(s) to be Solved by the Invention] However, the enjoyment of a game will be lacked that it is difficult only for what formed the lamp which tells winning a prize near the display like before for winning-a-prize Rhine to express whether a prize was won in which Rhine when winning-a-prize Rhine was complicated, in order to attain diversification of a game better at the cases of being comparatively simple, such as linear, and the distinction cannot be easily attached as for a game person.

[0006] It is in raising the enjoyment of a game sharply, as this invention is accomplished in view of the above situations and, as for the place made into the purpose, a game person can distinguish easily the pattern which corresponds at the time of winning a prize.

[0007]

[Means for Solving the Problem] The display with which two or more patterns align in all directions, and are indicated to be in order that this invention may attain the above-mentioned purpose, In the slot machine which supplied the regular right to the game person when the pattern which has a control unit for changing each of that pattern, and was shown in said display formed a predetermined winning-a-prize pattern It leaves the pattern which formed the winning-a-prize pattern in said display, and the field which counters with transparence, and the slot machine characterized by having a discernment means by which other patterns and the field which counters are temporarily made translucent or opaque is offered.

[0008] Moreover, the display with which two or more patterns align in all directions as other modes, and this invention is indicated to be, In the slot machine which supplied the regular right to the game person when the pattern which has a control unit for changing each of that pattern, and was shown in said display formed a predetermined winning-a-prize pattern It paints to this pattern and the field which counters, changing into a visible condition the pattern which formed the winning-a-prize pattern in said display, and the slot machine characterized by having a discernment means to distinguish from the field where other patterns counter is offered.

[0009] Although the shield whose closing motion according to an individual is enabled can also be formed on the display position of each pattern as a discernment means here, it is desirable to constitute a discernment means from a liquid crystal panel preferably.

[0010]

[Embodiment of the Invention] Hereafter, the example of application of this invention is explained to a detail based on a drawing. First, drawing 1 is the front view having shown an example of a slot machine. In drawing 1, it is the machine frame with which 1 accomplishes sheathing of a slot machine, and the pivotable drum which made 2 the interior of a machine frame at the letter of 3 juxtaposition, and was prepared, and two or more patterns of a class are given to the peripheral surface of each of that drum 2 at equal intervals in the hoop direction, respectively. 3 is the display which can see through the pattern of each drum, and for every drum, every three a total of nine patterns align in all directions, and it is shown in this display 3. 4 is a control unit for changing the pattern which appeared in the display, and this control unit 4 consists of a slot lever 5 for rotating each drums 2 all at once, and a stop button 6 for stopping each drum 2 according to an individual. It is input port of the guidance LGT for specifying the starting LGT which prepared 7 in the bottom of a display corresponding to each drum, and winning-a-prize Rhine confirmed by 8, and a medal required for 9 to perform a game, among these starting LGT 7 is turned on during rotation of a drum 2, and at the time of winning a prize, only the thing on corresponding Rhine blinks guidance LGT 8 while switching on the light in order according to the number of injections of a medal. Moreover, return opening for 10 to pay out the medal of a predetermined number at the time of winning a prize, the saucer which receives the medal which 11 paid out, and 12 are drops which display the volume of payment of a medal. Here, the medal used for a game can be stored not only in supplying from input port each time but in an internal memory to 50 sheets as data. The injection carbon button used when the indicator with which 13 shows the reservoir quantity, and 14 use this medal, and 15 are the liquidation carbon buttons for taking out the actual thing of this medal. In addition, the return carbon button used when the medal which supplied 16 to input port is got blocked, and 17 show the ash pan.

[0011] Next, drawing 2 shows the example of a configuration of the control circuit in this application slot machine. In drawing 2, control-block A begins CPU18 as a central processing unit, the executive program of a game is written in ROM19, including ROM19 and RAM20, and the data needed for games, such as reservoir medal quantity, are written in RAM20 each time.

[0012] On the other hand, a drum 2 is linked for control-block B to the drum 2 as a controlled system, the slot lever 5 as a control unit 4 and a stop button 6, and a list with CPU18 through the control section 21 and position transducer 22 of the motor for a drive, including input port 9. Moreover, it is made to be transmitted by the quantity of the medal thrown in from input port 9 through the quantity detector 23 at CPU18 so that

clearly [ in this drawing ]. Here, an output unit including starting LGT 7, guidance LGT 8, drops 12 and 13, etc. is connected to CPU18 through a control section 24. Moreover, the hopper 26 in which many medals are stored, and the liquid crystal panel 33 mentioned later are also respectively connected to CPU18 through the control sections 25 and 27.

[0013] Next, drawing 3 shows the example of a configuration of a display. A display 3 carries out opening of the part of the front face of a machine frame 1 which faces the peripheral surface of each drum 2, considers as an aperture 31, and is constituted by fixing a liquid crystal panel 33 through a bezel 32 inside this aperture 31 so that clearly [ in this drawing ]. The liquid crystal panel 33 constitutes the discernment means which can distinguish easily the pattern in which the winning-a-prize pattern was formed, as coloring control of the pattern of each drum 2 at the time of a halt and the nine fields which counter is carried out by the driver slack control section 27 according to an individual.

[0014] Drawing 4 is the example which painted to the opposed face with other patterns, and was made translucent, leaving an opposed face with the pattern in which the winning-a-prize pattern was formed, transparently and colorlessly. The stellate pattern which a winning-a-prize pattern is formed in drawing 4 of three patterns shown with stellate, and forms that winning-a-prize pattern at this time, and the field which counters are left behind while it has been transparent and colorless, it is painted to the field where other patterns unrelated to a winning-a-prize pattern counter by the translucent condition (slash section of drawing), and it is made indistinct [ this pattern ]. Since it becomes clear while only the pattern in which the pattern which forms a winning-a-prize pattern by this, and the other pattern are divided into light and darkness, and form a winning-a-prize pattern has been in a visible condition, a game person can distinguish a winning-a-prize condition in an instant.

[0015] Here, if an operation of the slot machine constituted as mentioned above is explained, in performing a game, a game person will throw the medal of 1-3 sheets into input port 9 first. Then, while winning-a-prize Rhine confirmed is decided, a game person can check the number of injections of a medal with lighting of guidance LGT 8. And after checking this, each drums 2 rotate all at once by operating the slot lever 5. Then, timing is measured, each stop button 6 is stopped to push, and the corresponding drum 2 is stopped in order. If the pattern which all the drums 2 stopped and was shown in the display 3 in this way forms a predetermined winning-a-prize pattern, it will be detected by the position transducer 22 which this shows to drawing 2, and the detecting signal will be outputted to the control section 27 of a liquid crystal panel 33 through CPU18. Thereby, a liquid crystal panel 33 drives only fixed time amount, it leaves the pattern in which the winning-a-prize pattern was formed, and the field which counters, and it is palely painted to other patterns and the field which counters in red etc., and it is supposed that it is translucent. And when fixed time amount passes, a liquid crystal panel 33 will be made into a non-operative condition, and all corresponding patterns can be vividly checked through a display 3 by returning all fields transparently and colorlessly.

[0016] In addition, when the expenditure signal of a medal is outputted also to a hopper 26 through a control section 25 at the time of winning a prize and a prize is especially won in a predetermined pattern, the program of ROM19 carries out a step to a specific routine as everyone knows, and the so-called bonus game is started. On the other hand, if it becomes clear that the winning-a-prize pattern is not formed on which winning-a-prize Rhine by the position transducer 22, the signal will be outputted to the control section 27 of a liquid crystal panel 33 through CPU18, and all the fields of the liquid crystal panel 33 which counters each pattern by this will tell it having been painted only to fixed time amount by the translucent condition, and having not won a prize of a game person.

[0017] As mentioned above, although a suitable example of this invention was explained, this invention can also change the pattern corresponding to this into the entire invisible condition instead of an indistinct display by making deep coloring of a pattern unrelated not only to for example, the above-mentioned example but a winning-a-prize pattern, and the field which counters, and making this field opaque. On the contrary, while painting to an opposite field with this pattern at a translucent condition, with fluoroscopy of the pattern in which the winning-a-prize pattern was formed enabled, while it has been transparent and colorless, it can leave an opposite field with other patterns. Moreover, while painting in the translucent condition, the field on a pattern unrelated to a winning-a-prize pattern is made unique [ on the pattern related to a winning-a-prize pattern / the field and unique ], and you may make it paint to the field on the pattern in which the winning-a-

prize pattern was formed, translucent or opaquely.

[0018] Furthermore, as a method of controlling a discernment means slack liquid crystal panel, whenever 1 time of a game is completed (after a halt of all drums), it paints to all the fields of a liquid crystal panel 33 translucent or opaquely. When the field on winning-a-prize Rhine which corresponds in response to the detecting signal at the time of a medal injection is made into transparency, all the drums 2 stop and a winning-a-prize pattern is formed in a predetermined pattern It leaves the field which counters this and other fields are previously made translucent or opaque, and subsequently, it may be made to make a winning-a-prize pattern space translucent or opaque (after fixed time amount progress until a medal finishes paying out).

[0019] A discernment means is not constituted from a liquid crystal panel of one sheet, but you may make it control these according to an individual on the other hand using the liquid crystal panel of the number corresponding to the pattern which appears in a display, respectively. Moreover, a discernment means slack liquid crystal panel is made to face on the peripheral surface of each drum, and it does not equip, but you may make it pile up the liquid crystal panel as a discernment means on the display as a display which consists each drum of a liquid crystal display. Furthermore, you may make it form the shield in which switching operation is possible according to an individual on the screen of each pattern in the display with which a pattern aligns in all directions and is indicated to be, respectively, not using a liquid crystal panel as a discernment means.

[0020] Here, a winning-a-prize pattern may not restrict to a pattern of the same kind arranging on a straight line, and may set up the case where the pattern shown in a heart form like drawing 5 is located in a line in the shape of a cross joint, as a winning-a-prize pattern. Even if it makes it especially a winning-a-prize pattern like drawing 5 by this invention, it is possible to distinguish this in an instant.

[0021]

[Effect of the Invention] By the above explanation, according to the slot machine concerning this invention, so that clearly When the pattern which appeared on the display forms a predetermined winning-a-prize pattern From having the discernment means which made translucent or opaque the field where the opposite field is made into transparency, and an unrelated pattern counters At the time of winning a prize, a game person can distinguish whether which winning-a-prize pattern of a number of inside was formed, and in what kind of location of a display the winning-a-prize pattern was formed in an instant. Thereby, it can complicate a winning-a-prize pattern and the enjoyment of a game not only increases, but can attain diversification of a game.

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## CLAIMS

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[Claim(s)]

[Claim 1] It has the display with which two or more patterns align in all directions, and are indicated to be, and a control unit for changing each of that pattern. In the slot machine which supplied the regular right to the game person when the pattern shown in said display formed a predetermined winning-a-prize pattern The slot machine characterized by having a discernment means by which leave the pattern which formed the winning-a-prize pattern in said display, and the field which counters with transparency, and other patterns and the field which counters are temporarily made translucent or opaque.

[Claim 2] It has the display with which two or more patterns align in all directions, and are indicated to be, and a control unit for changing each of that pattern. In the slot machine which supplied the regular right to the game person when the pattern shown in said display formed a predetermined winning-a-prize pattern The slot machine characterized by having a discernment means to distinguish from the field where it paints to this pattern and the field which counters, changing into a visible condition the pattern in which the winning-a-prize pattern was formed, and other patterns counter said display.

[Claim 3] Claim 1 to which a discernment means changes from a liquid crystal panel, or the slot machine indicated to 2.

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